

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Listing of Claims:

Claim 1 (Currently Amended): An information retrieval system in which ~~a set of~~ ~~distinct~~ information items map to respective nodes in an array of nodes by mutual similarity of said information items, so that similar information items map to nodes at similar positions in said array of nodes to form an self-organizing map, said system comprising:

(i) a graphical user interface ~~for displaying~~ configured to display a representation of ~~at least some of said nodes~~ of the organized map as a two-dimensional display array of display points within a display area on a user display;

(ii) a user control ~~for defining~~ configured to define a two-dimensional region of said display area;

(iii) a detector ~~for detecting~~ configured to detect those display points lying within said two-dimensional region of said display area; and

(iv) a comparator configured to compute a quantization error of a newly received information item and comparing the error to the organized map, and configured to retrain the organized map when the quantization error is above a predetermined threshold, and wherein

(iv)-said graphical user interface is further configured to ~~also~~ concurrently displaying display a list of data representing information items, being those information items mapped onto said nodes corresponding to display points displayed within said two-dimensional region of said display area.

Claim 2 (Original): A system according to claim 1, in which said information items are mapped to nodes in said array on the basis of a feature vector derived from each information item.

Claim 3 (Original): A system according to claim 2, in which said feature vector for an information item represents a set of frequencies of occurrence, within that information item, of each of a group of information features.

Claim 4 (Original): A system according to claim 3, in which said information items comprise textual information, said feature vector for an information item represents a set of frequencies of occurrence, within that information item, of each of a group of words.

Claim 5 (Original): A system according to claim 1, in which said information items comprise textual information, said nodes being mapped by mutual similarity of at least a part of said textual information.

Claim 6 (Original): A system according to claim 4, in which said information items are preprocessed for mapping by excluding words occurring with more than a threshold frequency amongst said set of information items.

Claim 7 (Original): A system according to claim 4, in which said information items are preprocessed for mapping by excluding words occurring with less than a threshold frequency amongst said set of information items.

Claim 8 (Currently Amended): A system according to claim 4, comprising:

(i) search logic ~~for carrying~~ configured to carry out a word-related search of said information items; wherein

(ii)-said search logic and said graphical user interface ~~being~~is arranged to co-operate so that only those display points corresponding to information items selected by said search are displayed.

Claim 9 (Currently Amended): A system according to claim 1, in which said mapping between information items and nodes in said array includes a dither component configured to display nodes that have substantially identical or identical information items at different locations in a display area to visibly distinguish the nodes having substantially identical or identical information items~~so that substantially identical information items tend to map to closely spaced but different nodes in said array.~~

Claim 10 (Currently Amended): A system according to claim 1, further comprising: a user control ~~for choosing~~configured to choose one or more information items from said list;~~and,~~

wherein said graphical user interface ~~being operable~~is further configured to alter said manner of display within said display area of display points corresponding to selected information items.

Claim 11 (Original): A system according to claim 10, in which said graphical user interface is operable to display in a different colour and/or intensity those display points corresponding to information items chosen within said list.

Claim 12 (Currently Amended): An information storage system in which ~~a set of distinct~~ information items are processed so as to map to respective nodes in an array of nodes by mutual similarity of the information items, such that similar information items map to

nodes at similar positions in the array of nodes to form a self-organizing map, the system comprising:

a generator configured to generate a feature vector derived from each information item of the self-organizing map, the feature vector for an information item representing a set of frequencies of occurrence, within that information item, of each of a group of information features; and

mapping logic configured to map each feature vector to a node in the ~~array of nodes~~ self-organizing map, the mapping between information items and nodes in the array including a dither component configured to display nodes that have so that substantially identical or identical information items at different locations in a display area to visibly distinguish the nodes having substantially identical or identical information items ~~tend to map to closely spaced but different nodes in the array.~~

Claim 13 (Currently Amended): A system according to claim 12, comprising:

logic configured to map a newly received information item to a node in the array of nodes;

a mapping error detector configured to detect a mapping error as the newly received information item is so mapped; and

logic, responsive to a detection that the mapping error exceeds a threshold error amount, ~~for initiating~~ configured to initiate a remapping process of the set of information items and the newly received information item.

Claim 14 (Original): A portable data processing device comprising a system according to claim 1.

Claim 15 (Original): Video acquisition and/or processing apparatus comprising a system according to claim 1.

Claim 16 (Currently Amended): An information storage method in which ~~a set of distinct~~ information items are processed so as to map to respective nodes in an array of nodes by mutual similarity of the information items, such that similar information items map to nodes at similar positions in the array of nodes to form an self-organizing map, the method comprising:

generating a feature vector derived from each information item of the self-organizing map, the feature vector for an information item representing a set of frequencies of occurrence, within that information item, of each of a group of information features; and

mapping each feature vector to a node in the ~~array of nodes~~ self-organizing map, the mapping between information items and nodes in the array including a dither component configured to display nodes that have so that substantially identical or identical information items at different locations in a display area to visibly distinguish the nodes having substantially identical or identical information items ~~tend to map to closely spaced but different nodes in the array.~~

Claim 17 (Currently Amended): An information retrieval method in which a set of distinct information items map to respective nodes in an array of nodes by mutual similarity of said information items, so that similar information items map to nodes at similar positions in said array of nodes, the method comprising:

- (i) displaying a representation of at least some of said nodes as a two-dimensional display array of display points within a display area on a user display;
- (ii) defining, with a user control, a two-dimensional region of said display area;

(iii) detecting those display points lying within said two-dimensional region of said display area; ~~and~~

(iv) displaying, concurrently with the representation of at least some of said nodes, a list of data representing information items, being those information items mapped onto nodes corresponding to display points displayed within said two-dimensional region of said display area; and

(v) computing a quantization error of a newly received information item, comparing the error to the organized map, and retraining the organized map when the quantization error is above a predetermined threshold.

Claim 18 (Previously Presented): Computer software having program code for carrying out a method according to claim 16.

Claim 19 (Original): A providing medium for providing program code according to claim 18.

Claim 20 (Original): A medium according to claim 19, said medium being a storage medium.

Claim 21 (Cancelled).

Claim 22 (Previously Presented): Computer software having a program code for carrying out the method according to claim 17.